

## Developing Essential Questions

In “[How to Develop a Standards-Based Unit of Study](#)” (KDE), pp. 12-16 deal with ‘Essential Questions.’ Below is an excerpt explaining what they are and what they ‘look like.’

### Essential Questions

The third component, the **essential questions**, narrows the focus of the learning by breaking the organizer into logical, sequenced parts for instruction. They must be written in a way that encourages higher order thinking and promotes in-depth investigation. Therefore, they are not questions that can be answered with a simple “yes” or “no,” and they are limited in number. Since the essential questions guide instruction and learning, they should be posted in the classroom for both the teacher and students to see. For that reason, the questions need to be written in student friendly language.

**Examples:**

**Organizer:** Why has Greek mythology endured over time?  
**Essential Questions:**

1. What is a myth?
2. Why did the Greeks create myths?
3. How do ideas and lessons in the myths still apply today?
4. What other connections do the myths have to current times?

**Organizer:** Should I lead or should I follow?  
**Essential Questions:**

1. How do I know a leader when I see one?
2. How do I know if a leader should be followed?
3. How do leaders develop?
4. What qualities of leadership, do I have?
5. When do I follow and when do I lead?

Course and/or units of study should be constructed around Essential Questions—and those questions should guide the development of subsequent formative and summative assessments **BEFORE** any learning activities are selected. By doing so, unconnected and less important activities will not be considered and therefore will not take up critical teaching and learning time. Ideally, the essential questions for the course/unit will point to the larger, transferable ‘big ideas.’

Some science specific examples of essential questions (from [Understanding by Design](#) (McTighe and Wiggins, 1999) include:

- *How do we classify the things around us? (KY Core Content for Assessment [KY CCA]: Structure and Transformation of Matter)*
- *How does an organism’s structure enable it to survive in harsh or changing environments? (KY CCA: Unity and Diversity)*
- *How are forces and motion connected? (KY CCA: Motion and Forces)*
- *How do the unique chemical and physical properties of water make life on earth possible? (KY CCA: Structure and Transformation of Matter)*
- *How can materials with the same chemical composition be so different (e.g., graphite, diamonds)? (KY CCA: Structure and Transformation of Matter)*
- *How do species change through time? (KY CCA: Biological Change)*
- *How does energy move? Where does it go? (KY CCA: Energy Transformations)*

By establishing essential questions first, you ensure that a focus for the course/unit is established. By sharing the questions with students at the outset, you provide a focus for them and can facilitate metacognition as they constantly gauge their own progress toward 'answering' the essential questions.

Some Tips related to Essential Questions (from [\*Understanding by Design\*](#)):

- Frame the questions in kid-friendly language and ensure that every student understands them and their significance to success with the course/unit.
- Design assessment tasks (as soon as the essential questions are developed) that are explicitly linked to the questions.
- Post the essential questions in the classroom and encourage students to organize their notes around them.
- Allow plenty of time to explore and investigate the questions. Be sure that all inquiries/readings/activities align to and support the essential questions.

[“How to Develop a Standards-Based Unit of Study”](#) guide

[\*Understanding by Design\*](#) (ASCD)